

CLAIMS

Therefore, having thus described the invention, at least the following is claimed:

- 1 1. An apparatus for controlling the height of a flame comprising:
2 a reservoir for containing a flame-fueling liquid;
3 a wick having a first end disposed within the reservoir and a second, flame-
4 bearing end substantially located above the first end, whereby, when the flame-fueling
5 liquid is supplied to the reservoir, the flame-fueling liquid is communicated up the wick
6 to fuel a flame emanating from the flame-bearing end of the wick;
7 a collar surrounding the wick slidable along a vertical axis between a first position
8 and a second position, wherein in the first position a top portion of the collar is located
9 above the flame-bearing end of the wick, wherein in the second position the top portion
10 of the collar is located below the flame-bearing end of the wick, so that in the first
11 position the collar substantially blocks the flow of atmospheric air from reaching the
12 wick, and in the second position the collar does not substantially block the flow of
13 atmospheric air from reaching the wick.
- 1 2. The apparatus of claim 1, wherein the collar has one or more perforations
2 allowing air to pass through.
- 1 3. The apparatus of claim 1, further comprising an adjusting means for
2 adjusting the collar along the vertical axis.
- 1 4. The apparatus of claim 1, further comprising:
2 a cap which controls the flow of atmospheric air into the reservoir; and

3 a sleeve closely conforming to the shape of the wick and enclosing a substantial
4 portion of the wick, wherein the fuel-supplying end of the wick does not extend past the
5 sleeve.

1 5. The apparatus of claim 1, further comprising an air channel disposed to
2 supply oxygen to the wick, where a first end of the air channel is substantially located
3 near the flame-bearing end of the wick.

1 6. The apparatus of claim 5, wherein the air channel is substantially disposed
2 through a central portion of the fuel reservoir.

1 7. The apparatus of claim 5, wherein the second end of the air channel is
2 substantially disposed beneath the first end of the wick.

1 8. The apparatus of claim 5, wherein the first end of the air channel is
2 substantially disposed within a central portion of the wick.

1 9. The apparatus of claim 1, wherein the wick is shaped in the form of a
2 hollow cylinder.

1 10. The apparatus of claim 1, wherein the wick has a solid cylindrical shape.

1 11. The apparatus of claim 1, wherein the wick is made of glass fiber.

1 12. The apparatus of claim 1, further comprising a wick sleeve to carry the
2 first wick.

1 13. An apparatus for controlling the height of a flame comprising:

2 a reservoir having a first surface, and a second surface opposite the first surface,
3 the second surface having a plurality of projections;

4 a wick having a first end disposed within the reservoir and a second, a flame-
5 bearing end substantially located above the first end, whereby, when a flame-fueling
6 liquid is supplied to the reservoir, the flame-fueling liquid is communicated up the wick
7 to fuel a flame emanating from the flame-bearing end of the wick;

8 a substantially vertical channel disposed within a central portion of the reservoir
9 to supply oxygen to the wick, wherein a first end of the vertical channel is substantially
10 disposed within a central portion of of the flame-bearing end of the wick, wherein a
11 second end of the vertical channel is located at the second surface of the reservoir;

12 a plate having a first and second groove for receiving each of the projections, the
13 first groove having a first depth and the second groove having a second depth;

14 and a horizontal channel defined between the plate and the second surface and
15 contiguous with the vertical channel,

16 wherein when the projections are received by the first groove the horizontal
17 channel has a first height, and when the projections are received by the second groove the
18 horizontal channel has a second height which is smaller than the first height.

1 14. The apparatus of claim 13, further comprising a third groove having a
2 third depth, where the third depth is between the first depth and the second depth.

1 15. The apparatus of claim 13, wherein the first and second grooves are
2 contiguous to form a single groove having a depth varying between the first depth and the
3 second depth.

1 16. The apparatus of claim 13, wherein the base and the plate are cylindrical
2 and the first and second grooves are arcuate.

1 17. The apparatus of claim 13, wherein the wick is made of glass fiber.

1 18. The apparatus of claim 13, further comprising a wick sleeve to carry the
2 first wick.

1 19. An apparatus for controlling the height of a flame comprising:
2 a first reservoir for containing a first flame-fueling liquid;
3 a second reservoir for containing a second flame-fueling liquid, having a plurality
4 of projections extending from a first surface;

5 a first wick shaped in the form of a hollow cylinder, having a first end disposed
6 within the first reservoir and a second, flame-bearing end located above the first end,
7 whereby, when the first flame-fueling liquid is supplied to the first reservoir, the first
8 flame-fueling liquid is communicated up the first wick to fuel a first flame emanating
9 from the flame-bearing end of the first wick;

10 a second wick shaped in the form of a hollow cylinder, having a first end disposed
11 within the second reservoir and a second, flame-bearing end located above the first end,
12 wherein the first wick is centrally disposed and the second wick is coaxially aligned with
13 the first wick, whereby, when the second flame-fueling liquid is supplied to the second
14 reservoir, the second flame-fueling liquid is communicated up the second wick to fuel a
15 second flame emanating from the flame-bearing end of the second wick;

16 a first air channel disposed within a central portion of of the first wick, where a
17 first end of the first air channel is located near the flame-bearing end of the first wick,

18 where a second end of the first air channel is located near the first surface of the second
19 reservoir;

20 a second air channel located between the first wick and the second wick;

21 a plate having a first and second groove for receiving each of the projections, the
22 first groove having a first depth and the second groove having a second depth;

23 and a horizontal channel defined between the plate and the first surface of the
24 second reservoir and contiguous with the second end of the first air channel,

25 wherein when the projections are received by the first groove the horizontal
26 channel has a first height, and when the projections are received by the second groove
27 the horizontal channel has a second height which is smaller than the first height.

1 20. The apparatus of claim 19, further comprising a collar surrounding the
2 second wick slidable along a vertical axis between a first position and a second position,
3 wherein in the first position a top portion of the collar is located above the flame-bearing
4 end of the second wick, wherein in the second position the top portion of the collar is
5 located below the flame-bearing end of the second wick, so that in the first position the
6 collar substantially blocks the flow of atmospheric air from reaching the second wick,
7 and in the second position the collar does not substantially block the flow of atmospheric
8 air from reaching the second wick.